# 2021 Health Works Commission Annual Report

#### **Executive Summary**

The Louisiana Health Works Commission, a legislatively created Commission, serves as a collaborative working group charged with coordinating resources relative to health care workforce development within various state departments and key organizations. The Commission is comprised of postsecondary, legislative, and medical organizations (see Table A). The Board of Regents provides the necessary staff to support the legislative charge and work of the Commission.

**Table A:** Louisiana Health Works Commission Organizations

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Workforce Commission	Nursing Supply & Demand Council
Department of Health	LSU Health Shreveport
Hospital Association	LSU Health New Orleans
Nursing Home Association	Louisiana Community and Technical College System
Senate Committee on Health and Welfare	Louisiana Association of Independent Colleges and
	Universities
House Committee on Health and Welfare	University of Louisiana System
Governor's Office	Southern University System
Board of Regents	State Board of Nursing
Louisiana Association of Nurse Practitioners	Academy of Family Physicians
Medical Education Commission	Occupational Forecasting Conference
Louisiana State Board of Practical Nurse	LSU Health New Orleans School of Dentistry*
Examiners	
Simulation Medical Training and Education	
Council*	

<sup>\*</sup>Ad Hoc Members

The Health Works Commission is required, pursuant to LA Revised Statute §17:2048.51, to submit an annual report. This report is composed of two sections:

- Part 1: 2021 Nursing Supply and Demand Council Annual Report
- Part 2: Louisiana Healthcare Workforce Landscape Report

In Part 1 of the report, the Nursing Supply and Demand Council, which is a subset of the Health Works Commission, is charged with studying all aspects of supply and demand of Advanced Practice Registered Nurses (APRNs), Registered Nurses (RNs), Licensed Practical Nurses (LPNs), and Nurse Aides. This report was approved by the Health Works Commission on February 15, 2022. In Part 2 of the report, the Board of Regents contracted with Impact Econ Research, to conduct a healthcare workforce landscape report to support the strategic efforts in creating a healthcare workforce pipeline. This work directly supports the Health Works Commission as well as the Master Plan goal of 60% of working-age adults in Louisiana holding a degree or high-value credential by 2030.

Key findings of the two reports include:

#### Part 1: 2021 Nursing Supply and Demand Council Annual Report

- The number of graduates from Louisiana's pre-Registered Nursing (RN) licensure programs increased by 7% since 2019, which represents an increase of 119 graduates in 2020. Since 2016, there has been a 4% increase in pre-RN licensure graduates.
- In 2019-2020, there was a 71% increase in current recipients of the Board of Regents Faculty Stipend. In 2019, 28 nurse faculty were receiving the stipend and in 2020 48 faculty were

- working on either a master's (10) or doctoral degree (38). There was also a 44% increase (88 in 2019-2020, 61 in 2018-2019) in the number of faculty who were previous stipend recipients.
- The Louisiana Center for Nursing (LCN) conducts a Nurse Employer Survey every four years to obtain data related to the demand for nurses in Louisiana. In the 2019 survey, the report estimated an unmet demand for 1,948 RNs, 1,301 Licensed Practical Nurses, and 942 Nurse Aides in 2019 at those facilities that participated in the survey.

#### Part 2: Louisiana Healthcare Workforce Landscape Report

- Data on job postings for healthcare occupations in Louisiana during the past five years shows that registered nurses account for the greatest labor shortage, with an average of 164 unique job postings per month.
- The labor supply estimates for 2030 show that nursing shortages will continue unabated if interventions are not undertaken. Data show that only 4,478 of the 10,660 registered nurse positions will be filled, leaving a shortage of 6,182 registered nurses, or 42 percent of the total demand.

The next steps in response to this report and research include:

- The formation of a subcommittee to put forth an action plan to guide the future efforts of the Commission and prioritize report recommendations.
- The creation of a revised nurse educator stipend program, informed by a Commission subcommittee.
- Advocacy for funding of academic-practice partnerships to leverage public and private investments designed to encourage innovation and address regional healthcare workforce needs.

# PART 1 NURSING SUPPLY & DEMAND COUNCIL 2021 ANNUAL REPORT APPROVED BY THE HEALTH WORKS COMMISSION February 2022

# **Executive Summary**

The Nursing Supply & Demand Council (NSDC) is pleased to submit a report of its activities for 2021 and projected initiatives for 2022. The charge of the NSDC is to study all aspects of supply of and demand for Advanced Practice Registered Nurses (APRNs), Registered Nurses (RNs), Licensed Practical Nurses (LPNs) and Nurse Aides. Information on Louisiana's nursing workforce was obtained from data provided in the most recent report on Nursing Education Capacity in Louisiana, the most recent Nurse Supply Report, the Louisiana State Board of Practical Nurse Examiners annual report (LSBPNE) and reporting from the Louisiana Department of Health (LDH).

In the face of the ongoing demand for nurses at all levels, the Council continues to have concerns about the following:

- shortage of faculty;
- number of qualified students not admitted;
- lack of funding for nursing education; and
- challenges related to increasing the diversity of Louisiana's nursing workforce.

#### **Activities**

The NSDC, representing 17 statewide organizations and institutions, held a total of four meetings from January through December 2021 and accomplished the following collaborative activities:

- I. Reviewed reports from the Louisiana State Board of Nursing (LSBN), Louisiana Center for Nursing (LCN), LSBPNE, and LDH Health Standards Division regarding the supply of APRNs, RNs, LPNs, and Nurse Aides and made appropriate recommendations based on findings from these reports.
- II. Collaborated with the Louisiana Council of Administrators of Nursing Education (LACANE) to support the project funded by the Health Works Commission (HWC) to address the need for qualified master's- and doctoral-prepared faculty in Louisiana's pre-RN licensure and APRN programs. In 2020-21, LACANE awarded approximately \$98,577.58 in funding, which was distributed to 36 unique recipients teaching or planning to teach at 16 nursing schools in Louisiana.
- III. Prepared and submitted the 2020 NSDC Annual Report to the HWC.
  - a. In 2021, the HWC reviewed the 2020 NSDC Annual Report and used the data therein to leverage legislative support for capitation funds to build capacity in nursing education. NSDC will review data annually to evaluate the effects of capitation funding. The Council recognizes that annual approval of capitation funds is critical for sustainable increases in nursing education capacity.

# **Key Findings Pertinent to the Council's Charge**

#### **Supply – Education**

#### I. Admission and Enrollment

#### A. RN

- In 2020, 14,725 students enrolled in postsecondary education settings in Louisiana declared nursing as their major. This represents a 4% increase in number of enrolled students. Over the last five years (2016 to 2020) there has been a 29% increase in the number of students applying for admission to Louisiana's pre-RN licensure programs.
- ii. In 2020, pre-RN licensure programs in Louisiana admitted 72% (3,611) of qualified applicants (4,992), compared to 69% (3,390) in 2019 and 70% (3,198) in 2018. Over the last five years, there has been a 25% increase in the number of qualified applicants admitted.
- iii. In 2020, the number of students enrolled in clinical nursing courses increased by 8% (6,476 in 2019 and 6,973 in 2020).
- iv. In 2020, 64% of pre-RN students were enrolled in baccalaureate (BSN) programs, 35% in associate's degree (AD) programs, and one percent in the state's only diploma program.

#### v. Diversity:

- 1. In 2019-2020, 41% of the students enrolled in pre-RN licensure programs in Louisiana were minorities. There was a 24% increase in the number of Black/African American students, an 8% increase in the number of Asian students, a 2% increase in the number of Hispanic/Latino students, and a 16% increase in those reporting Other.
- 2. Males continue to account for only 12% of the students enrolled in pre-RN licensure programs.

#### B. APRN

- i. In the 2019-2020 report year, there was an 8% decrease in the number of students admitted to APRN programs in Louisiana compared to a 10% increase reported in the previous year.
- ii. Eighty-nine percent (608) of the 683 new admits were admitted to NP programs and 11% (75) were admitted to CRNA programs.
- iii. There was an overall 7% increase in the number of students enrolled in Louisiana's APRN programs during the current report year: 86% were enrolled in NP programs, 14% in CRNA programs, and less than 1% in CNS programs.

#### iv. Diversity:

- 1. In 2019-2020, approximately 35% of the students enrolled in Louisiana's APRN programs were minorities.
- 2. Since 2016, there has been an 80% increase in the number of Hispanic/Latino students, a 58% increase in the number of Black/African

- American students, and a 41% increase in the number of Asian students enrolled in Louisiana's APRN programs.
- 3. In 2020, 16% of APRN students were male and 84% were female.

#### C. LPN

- i. LPN programs admitted 70% (1,649 of 2,342) of qualified applicants in 2019-2020 as compared to 64% (1,735 of 2,704) in 2018-2019. This represents an increase of six percent in the number of PN students admitted to Louisiana LPN programs despite a decrease in the number of qualified applicants.
- ii. In the 2019-2020 academic year 1,210 students withdrew from LPN programs in Louisiana compared to 1,103 in 2018-2019, which represents a 9.7% increase in the number of withdrawals. The number of withdrawals has increased 20% over the last two years.
- iii. <u>Diversity</u>: Approximately 62% (1,306 of 2,111) of the students admitted (both first-time and readmits) to Louisiana's LPN programs in 2019-2020 were minorities. Approximately 57% percent of the new admits were Black/African American, less than 2% were Hispanic/Latino, and approximately 2% were American Indian/Alaskan Native, Asian, Hawaiian/Pacific Islander, Multiracial, and Other.

#### D. Nurse Aides

 In 2019-20, there were 169 Certified Nurse Aides (CNAs) who applied for articulated credit for entry into practical nurse programs (compared to 189 in 2018-2019; 226 in 2017-18; 213 in 2016-2017; 225 in 2015-2016). Of those who applied for credit, 92% (155) were granted the credit compared to 86.8% (164) receiving credit in 2018-2019.

#### II. Graduates

#### A. RN

- i. The number of graduates from Louisiana's pre-RN licensure programs increased by 7% since 2019, which represents an increase of 119 graduates in 2020. Since 2016, there has been a 4% increase in pre-RN licensure graduates.
- ii. Of the 2019-20 pre-RN graduates, 60% (1,294) of the 2,148 graduates completed BSN programs, 38% (816) completed AD programs, and 2% (38) completed Louisiana's only diploma program.
- iii. There was a 19% increase in the number of graduates from LPN to AD programs, a 7% increase in the number of graduates from LPN to BSN programs, and a 21% increase in the number graduating from accelerated programs.
- iv. The number of male graduates increased by 5% in 2019-2020 (235) when compared to 2018-2019 (224).
- v. <u>Diversity</u>: In 2019-2020, 31% (674) of the graduates from pre-RN licensure programs in Louisiana were minorities, which reflects an 11% increase in the number of minority graduates when compared to 2018-2019 (607 minority graduates). The greatest number of African American/Black graduates (246), Hispanic graduates (67), and Asian graduates (30) were from BSN programs.

#### B. APRN

- i. In the 2019-2020 report year, there were a total of 434 graduates from Louisiana's APRN programs, which represents a 6% decrease when compared to the 463 graduates in the previous report year (2018-2019).
- ii. In this report year, the majority of the graduates were from NP programs (84%), followed by CRNA programs (16%). There were no graduates from CNS programs in the current report year.

#### iii. Diversity:

- 1. Twenty-nine percent (127) of the graduates from APRN programs in Louisiana were minorities compared to 28% (110) in the previous report year.
- 2. Males represented 18% (77) of the graduates from Louisiana's APRN programs.

#### C. LPN

i. In 2019-20, there were 875 graduates from Louisiana's LPN programs. Graduate numbers have fluctuated, but there has been a general decline in the number of LPN graduates over the last ten years: 875 graduates in 2019-2020 compared to 1,370 in 2009-2010, which represents a 36% decrease.

#### D. Nurse Aide

i. In 2020, there were 211 schools and 94 nursing homes in Louisiana approved for CNA training and 2,347 CNAs were newly certified.

#### III. Pass Rates

#### A. RN

- i. In 2020, there were 2,158 RN candidates (2,044 in 2019) from nursing education programs in Louisiana who took the NCLEX-RN examination for the first time, which represents a 6% increase in number of examinees.
- ii. The first-time passage rate on the NCLEX-RN exam for candidates from Louisiana in 2020 was 92.77%, which exceeds the 86.57% national passage rate. The passage rate on the NCLEX-RN exam for Louisiana's graduates continues to exceed that of the nation.

#### B. APRN

i. In 2019-2020, 386 APRN candidates sat for their respective certification exams. Three hundred and sixty-three (363) candidates successfully passed their certification exams, resulting in a 94.04% passage rate for the state.

#### C. LPN

i. The 2019 NCLEX-PN national LPN passage rate for first-time, U.S.-educated graduates was 83.7%. Louisiana's LPN passage rate was 84.7%. Louisiana's LPN programs have exceeded the national average in all of the past 26 years, except in 2018.

### IV. Faculty

#### A. All Nursing Faculty

- i. Mean salaries for nursing faculty in Louisiana remain below the national mean for four-year public colleges.
- ii. According to the American Association of Colleges of Nursing (AACN), faculty shortages at nursing schools across the country are limiting student capacity at a time when the need for professional registered nurses continues to grow (2021). \*Fang, D. and Trautman, DE (2021). American Association of Colleges of Nursing Salaries of Instructional and Administrative Nursing Faculty in Baccalaureate and Graduate Programs in Nursing.

#### B. RN

- i. There were 505 budgeted full-time nurse faculty positions reported by Louisiana's pre-RN licensure programs as of October 15, 2020 compared to 482 on October 15, 2019, which reflects a 5% increase from the previous year.
- ii. There were 23 vacant nurse faculty positions reported by Deans and Directors in the current report year compared to 31 in the previous report year, which represents a 26% decrease in the number of vacant nurse faculty positions across the state.
- iii. In 2019-2020, there was a 71% increase in current recipients of the Board of Regents Faculty Stipend. In 2019, 28 nurse faculty were receiving the stipend and in 2020 48 faculty were working on either a master's (10) or doctoral degree (38). There was also a 44% increase (88 in 2019-2020, 61 in 2018-2019) in the number of faculty who were previous stipend recipients.

- iv. In 2020, 48 faculty positions were funded from grants, capitation funds, additional appointments, and/or other funding sources compared to 29 positions in 2019, which represents a 66% increase in the number of faculty positions funded by other sources.
- v. In 2019-2020, over half (51%) of the nurse faculty teaching in Louisiana's pre-RN licensure programs were 51+ years and 23% were 61+ years of age.
- vi. Nursing programs cite noncompetitive salaries for nursing faculty and a lack of qualified faculty as the top reasons that Louisiana's pre-RN licensure programs cannot admit hundreds more qualified students.
- vi. <u>Diversity</u>: In 2019-2020 approximately 32% (284) of the faculty teaching in Louisiana's pre-RN licensure programs were minorities, which represents a 7% increase compared to the previous report year.

#### C. APRN

- i. There was a 7% increase in the number of graduate nurse faculty holding a doctorate in nursing compared to a 20% increase observed in the previous report year.
- ii. There was a 6% increase in the number of faculty holding a DNP in 2019-2020, with a total 84% increase over the past five years. The number of PhDs increased by seven, going from 37 in 2018-2019 to 44 in 2019-2020.
- iii. There were 130 filled full-time graduate nurse faculty positions reported statewide, which reflects an 8% increase in number. Only four vacant graduate nurse faculty positions were reported in 2020, which represents a 20% decrease in the number of vacancies from the previous year and a 64% decrease in vacancies over the past five years.

#### iv. Diversity:

- 1. There was a 13% increase in the number of graduate nurse faculty who were males since the 2019 report year.
- 2. Twenty-one percent (69) of the faculty teaching in graduate nursing programs in Louisiana were minorities in the current report year.

#### D. LPN

 In 2019-2020, there were 188 budgeted full-time Practical Nurse faculty positions, which is a 2% decrease since last year (192 in 2018-2019). Of the budgeted positions, 92.6% (174) were filled in 2019-2020, compared to 90% (174) in 2018-2019.

#### **Supply – Current Workforce**

# V. 2020 RN, APRN and LPN Licensure Data and Nurse Aide Registry Data

The use of data for trend analysis started in 2018 with the introduction of the ORBS system for license renewal. There will be no five-year variances reported until the 2023 Annual Report.

#### A. RN

i. In 2020, there were 66,076 RNs holding an active license in Louisiana compared to 69,647 in 2019, which represents a 5.1% decrease in RNs. Of those licensed RNs, 90% were Louisiana residents and 10% resided outside of Louisiana.

#### ii. Diversity:

- 1. In 2020, 18% (10,557) of licensed RNs living in Louisiana were 60 years or older and 20% (11,870) were between the ages of 50 and 59. These percentages do not reflect a significant change from 2019.
- 2. In 2020, the racial distribution of RNs residing in Louisiana was 79% White, 17% Black/African American, 2% Asian, and 1% or less for each of the other races (two or more races, Other, American Indian/Alaskan Native, Native Hawaiian/Pacific Islander). Three percent of RNs in Louisiana were of Hispanic origin in 2020, which was unchanged from 2019.
- 3. The gender of RNs residing in Louisiana continues to be predominantly female (88% female, 12% male).

#### B. APRN

- i. In 2020, there were 7,630 APRNs holding an active Louisiana APRN license, which represents a 7% increase over the previous year (7,121 in 2019). Eightyseven percent (6,649) of the APRNs reported residing in Louisiana.
- Of the APRNs residing in Louisiana, 76% (4,748) were Nurse Practitioners (NPs), 22% (1,370) were Certified Registered Nurse Anesthetists (CRNAs), 2% (107) were Clinical Nurse Specialists (CNSs), and 1% (47) were Certified Nurse Midwives (CNMs).

#### iii. Diversity:

- 1. In 2020, 12% (809) of licensed APRNs living in Louisiana were 60 years or older and 19% (1,256) were between the ages of 50 and 59, which is similar to last year's report.
- 2. In 2020, the racial distribution of APRNs residing in Louisiana was 82% White, 15% Black/African American, 1% Asian, and less than 1% for each of the other races (two or more races, American Indian/Alaskan Native, Native Hawaiian/Pacific Islander and Other). Two percent of APRNs in Louisiana were of Hispanic origin.

3. The gender of APRNs residing in Louisiana is predominantly female (79% female, 21% male).

#### C. LPN

- i. In 2019-2020, 23,010 nurses held a license to practice as an LPN in Louisiana, which reflects an almost 4% increase when compared to the previous year (22,207). Of the LPNs holding a Louisiana license, 22,480 (97.7%) lived in Louisiana, while 530 (2.3%) reported home addresses outside of Louisiana.
- Diversity: In 2019-2020, 56% (12,914) of the LPN workforce was White, 40.6% (9,356) was Black/African American, and 2% (560) was Hispanic/Latino, American Indian/Alaska Native, Asian, Native Hawaiian/Pacific Islander, Multiracial, and Other. In terms of gender, 95% (21,940) of the LPN workforce was female.

### D. Nurse Aide (NA)

- i. Data on the supply of NAs represents only that gathered from Louisiana Department of Health's CNA Registry. Once certified and employed, many NAs do not recertify and therefore are not represented in the data. These data also do not capture the number of Nurse Technicians, who are nursing students with requisite skills employed in healthcare facilities working in a capacity similar to NAs.
- ii. In 2020, there were 209,815 NAs in the registry, both certified and uncertified, up from 207,524 in 2019. There were 41,744 certified NAs in good standing on the CNA Registry. There were 2,347 new CNAs in 2020 compared to 4,756 in 2018, which represents a 49% decrease in new CNAs over the last two years. Every year, thousands of CNAs change in status from certified to not certified (4,530 in 2020, 7,671 in 2019, 4,400 in 2018, and 7,697 in 2017).

#### **Demand**

- VI. The LCN conducts a Nurse Employer Survey every four years to obtain objective data related to the demand for nurses in Louisiana. The following results from the 2019 survey and Louisiana's 2019 Nursing Workforce Demand Report were reviewed.
  - A. A total of 1,405 health care facilities received the 2019 LCN Nurse Employer Survey with 489 surveys completed, yielding an overall 35% response rate.
  - B. The number of estimated RN vacancies in hospitals doubled, going from 2,033 in 2014 to 4,065 in 2018, an increase of 99.95%.
  - C. The highest vacancy rates for direct care RNs were 19.2% percent for long-term care facilities, 10.5% for Federally Qualified Health Centers, 9.5% for hospitals and 9.2% for home health.
  - D. In 2018, the median turnover rate for RNs in hospitals in Louisiana was 19.4% compared to a median turnover rate of 13.8% in 2014 and 17.0% in 2010.
  - E. The report estimated an unmet demand for 1,948 RNs, 1,301 LPNs, and 942 NAs in 2019 at those facilities that participated in the survey.

F. When vacancies were imputed for non-responding facilities, the total number of vacancies for all types of nursing personnel increased by 149% (9,284 estimated vacancies). The majority of the RN vacancies were for direct care RNs (4,484), which increased by 79% when compared to 2014 (2,504).

\*Post-pandemic survey data will be critical as nursing demand has increased along with turnovers and vacancies. Additionally, temporary staffing through travel and contract employment during the pandemic has increased dramatically as nurses leave their full-time or part-time employment for high-wage temporary positions.

#### Recommendations

# <u>Supply – Education</u>

- I. Expand capitation funds that provide funding to postsecondary education institutions to increase the capacity of RN and LPN programs in Louisiana.
- II. Advocate for and support academic-practice partnerships both to increase capacity of nursing programs (working nurses serving as mentors/faculty) and to improve retention (nurse residency programs).
- III. Provide nursing program infrastructure grants to improve nurse faculty retention and support faculty development, workload adjustments, mentorship of nurse faculty, and certification.
- IV. Provide funding for the development of a statewide strategic plan to address the nursing shortage and, specifically and ultimately, to increase diversity in the workforce.
- V. Support funding opportunities (grants, scholarships, tuition reduction programs, etc.) to decrease tuition costs for nursing students, especially those from diverse backgrounds.
- VI. Address nurse faculty salary disparities, which are among the most significant barriers to attracting nurse faculty to Louisiana.
- VII. Reinstate the stipend program previously administered by the Board of Regents, which provided a maximum of \$40,000 to nurses who agreed to pursue a graduate degree (master's and/or doctorate) in nursing and committed to teach in an RN program one year for each \$10,000 received in support.
- VIII. Remove legislative barriers that prevent nurse faculty from working as adjunct faculty upon retirement (e.g., discontinuation or reduction of retirement benefits).
  - IX. Support removal of barriers to certification testing for CNAs.
  - X. Identify and document strategies to improve access, admission, retention and graduation of minority students in the nursing workforce.

# <u>Supply – Current Workforce</u>

XI. Collaborate with hospitals, long-term care facilities, and other employers across the state to create nursing practice environments that attract and retain nurses, especially in areas of greatest need.

- XII. Develop strategies to collect and review workforce data on all NAs.
- XIII. Explore the feasibility of offering a temporary license to LPN graduates prior to their taking the NCLEX-PN licensure exam.
- XIV. Remove regulatory barriers (i.e., Collaborative Practice Agreement) to APRN practice to allow APRNs to practice to the full extent of their licensure and education.
- XV. Consider moving the demand study from a four-year to an annual cycle.
- XVI. Collaborate with practice partners and the Louisiana Hospital Association to increase response rates for the demand study.
- XVII. Make the forecast model accessible to regional practice partners.

# <u>Supply – Diversity Data</u>

XVIII. In 2022, conduct a comprehensive diversity study.

#### Other Collaborations

XIX. Create a collaborative committee or council including nurse educators, nurse executives, and LSNA to explore nurses' transition into practice as well as retention.

# Continuing Recommendations

- XX. Work collaboratively with LSBN, LCN, LSBPNE, and the LDH CNA Registry to obtain and review Louisiana's nursing workforce data (APRN, RN, LPN and CNA) and make recommendations to the HWC related to nursing workforce supply and demand and to nursing education capacity.
- XXI. Continue collaborative work with the Louisiana Action Coalition (LAC) in moving forward the following pillars of work in Louisiana, based on the recommendations in the Institute of Medicine Report on the Future of Nursing: *Leading Change, Advancing Health* (2011):
  - 1. Leveraging nurse leadership;
  - 2. Promoting inclusivity/health equity;
  - 3. Improving access and removing barriers to practice;
  - 4. Increasing the diversity of the nursing workforce; and
  - 5. Increasing the number of RNs with a BSN degree or higher.
- XXII. Support the LCN in its ongoing assessment of diversity in Louisiana's nursing workforce (race/ethnicity and gender) and continue to identify and implement innovative strategies that can be used to increase the diversity of the nursing workforce.

# **NSDC** Membership

The Louisiana State Board of Nursing

The Louisiana State Board of Practical Nurse Examiners

The Louisiana Nursing Home Association

The Louisiana State Nurses Association

The Louisiana Hospital Association

The Louisiana Board of Regents

The Louisiana Office of Public Health

The Louisiana Association of Independent Colleges and Universities

The Louisiana Black Nurses Organization New Orleans, Louisiana

The Louisiana Council of Administrators of Nursing Education

The Louisiana Association of Nurse Anesthetists

The Louisiana Organization for Nursing Leadership

The Louisiana Association of Nurse Practitioners

The Louisiana Council of the Association of Peri-Operative Registered Nurse Chapters

The Louisiana School Nurses Organization

The Southern University A&M School of Nursing

The President of the Louisiana Community and Technical College System

# **Health Works Commission Membership**

The Louisiana Department of Labor

The Louisiana Department of Health and Hospitals

The Louisiana Hospital Association

The Louisiana Nursing Home Association

The House and Senate Committees on Health and Welfare

The Governor's Office

The Louisiana Board of Regents

The Nursing Supply and Demand Council

The Louisiana State University Health Sciences Center at Shreveport

The Louisiana State University Health Sciences Center at New Orleans

The Louisiana State Board of Nursing

The Louisiana Community and Technical College System

The University of Louisiana System

The Southern University System

The Louisiana Association of Independent Colleges and Universities

The Medical Education Commission

The Occupational Forecasting Conference

The Louisiana State Board of Practical Nurse Examiners

The Louisiana Academy of Family Physicians

The Louisiana Association of Nurse Practitioners

Data used in this report were taken from reports completed by the Louisiana State Board of Nursing – Center for Nursing, available at the following links:

http://lcn.lsbn.state.la.us/Portals/0/Documents/2019NursingEducationCapacityReport.pdf; http://lcn.lsbn.state.la.us/Portals/0/Documents/2019%20Nurse%20Supply%20Report.pdf.

Additional data were collected from the Louisiana State Board of Practical Nurse Examiners. The NSDC



impact econ research



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# **Summary**

As in most industries, the demand for labor by employers in the healthcare industry is derived from the consumer demand for healthcare services. Yet according to the Agency for Healthcare Research and Quality, Louisiana is in the bottom ten states in overall healthcare quality. Louisiana's low national ranking in overall healthcare quality is largely driven by the limitations residents face in accessing different types of care. In effect, the high level of need and demand for healthcare services in Louisiana is not being met and labor shortages are a major contributor to this deficit.

The share of Louisiana residents accessing primary care services, or the preventative care visit utilization rate, has grown to 45 percent, marking a 50 percent increase between 2008 and 2019. The rate of outpatient visits has also increased by 20 percent, to 2,909 visits per 100,000 residents. These increases have had a substitutive effect on the incidence of hospital admissions, which have declined by 21 percent, from 154 to 122 hospital admissions per 100,000 residents. The hospital admissions rate in Louisiana has declined faster than the national hospital admissions rate because the increase in primary care access for Louisiana residents has increased drastically from historically low levels. Additionally, the number of residents in certified nursing home facilities has declined by five percent, from 26,930 to 25,515 between 2003 and 2019.

Since 2015, labor shortages in the healthcare and social assistance sector have been driven by increasing numbers of workers leaving the sector as well as by growth in consumer demand for healthcare services. Nationally, the COVID-19 pandemic then led to a record 1.2 million workers laid off in March 2020 alone. A large share of the workers laid off did not return to work in the healthcare and social assistance sector. As a result, the healthcare industry is facing a labor shortage that initially started with an increase in worker-initiated quits and was magnified by the pandemic-related layoffs.

Data on job postings for healthcare occupations in Louisiana during the past five years shows that registered nurses account for the greatest labor shortage, with an average of 164 unique job postings per month. Licensed practical nurses contribute 157 unique job postings per month and medical surgical registered nurses account for 89 unique job postings per month. The data show that nursing-related occupations account for the great majority of the labor shortage in Louisiana, with the exception of some occupations for technicians and therapists.

Data show that the demand for registered nurses, the largest occupation in the health industry, is driven mainly by hospitals. The second-largest occupation is home health aides, for which employment is distributed among hospitals, nursing care facilities, and home healthcare services. Third is licensed practical and licensed vocational nurses, with employment shared among hospitals, nursing care facilities, and outpatient care centers. The fourth largest healthcare occupation is physicians and surgeons, with employment concentrated in hospitals and physician offices. Data on the next 28 largest occupations employed in the healthcare industry show that most other occupations are employed in hospitals, physician offices, or outpatient care centers.

Women represent the majority of workers in most healthcare occupations, including the highest-demand occupation – registered nurses. Additionally, most occupations across the healthcare

industry exhibit large concentrations of either white or Black workers, but rarely reflect the actual racial distribution of the Louisiana population.

This report will 1) explain why the demand for workers in the healthcare industry has grown faster than the labor supply, 2) forecast the demand and supply of labor in the year 2030, and 3) detail the extent of workforce shortages.

The labor supply estimates for 2030 show that nursing shortages will continue unabated if interventions are not undertaken. Data show that only 4,478 of the 10,660 registered nurse positions will be filled, leaving a shortage of 6,182 registered nurses, or 42 percent of total demand. Data show that the magnitude of existing labor shortages is projected to increase. Labor supply should grow at a faster pace when pandemic labor market constraints (risk of sickness, lack of childcare, etc.) recede. However, with the continuation of the current labor market, large labor shortages in the healthcare industry are projected into 2030.

#### **Consumer Demand**

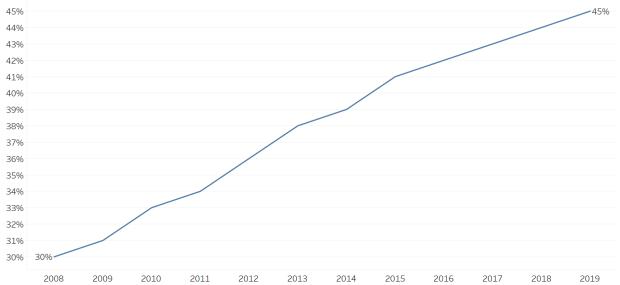
According to the Agency for Healthcare Research and Quality, Louisiana is in the bottom ten states, out of 50, in overall healthcare quality, along with Arkansas, California, Florida, Georgia, Nevada, New Mexico, Oklahoma, Tennessee, and Texas. Louisiana's low national ranking in overall healthcare quality is largely driven by the limitations residents face in accessing different types of care. In effect, the high level of need and demand for healthcare services in Louisiana is not being met.

Like most industries, the demand for labor by employers in the healthcare industry is derived from consumer demand for healthcare services. Yet the data collected in this report point to several labor-market-related constraints on the ability of healthcare providers to meet consumer demand for healthcare services. This section details the consumer demand for healthcare services in order to better understand the healthcare services driving the demand for labor in Louisiana's healthcare industry.

Consumer demand for healthcare services is revealed in the use of different kinds of services by Louisiana residents. However, data signal that, due to existing constraints on broad healthcare service access, the potential demand for healthcare services in Louisiana is considerably higher than the services currently consumed. The share of Louisiana residents accessing primary care services, the preventative care visit utilization rate, has increased by 50 percent between 2008 and 2019, to 45 percent. The data support evidence that a large share of Louisiana residents, 55 percent, continue to lack access to preventative care services.

<sup>1</sup>Source: Agency for Healthcare Research and Quality. 2018. 2015 National Healthcare Quality and Disparities Report. <a href="https://www.ahrq.gov/data/infographics/state-compare-text.html">https://www.ahrq.gov/data/infographics/state-compare-text.html</a> Note: Healthcare quality is based on three dimensions: type of care (such as preventive or chronic), setting of care (such as nursing homes or hospitals), and clinical areas (such as care for patients with cancer or diabetes).

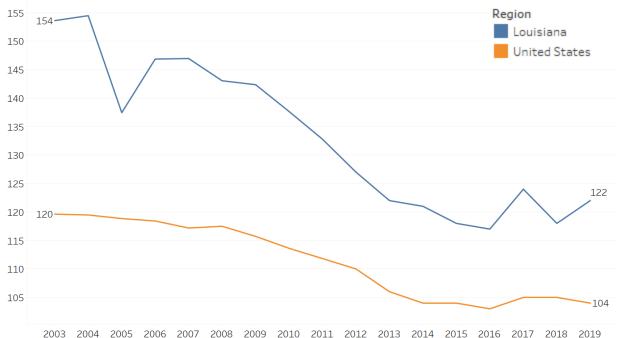
# Preventative Care Visit Utilization (Share of Residents)



Source: Robert Graham Center. 2021. Primary Care in the United States: A chartbook of facts and statistics. https://www.graham-center.org/content/dam/rgc/documents/publications-reports/PrimaryCareChartbook2021.pdf

The sharp increase in preventative care access has occurred parallel to a steady decline in the use of hospital services as measured by the number of hospital admissions per 100,000 residents. Between 2003 and 2019, the rate of hospital admissions declined by 21 percent, from 154 to 122 hospital admissions per 100,000 residents. The latter is due to the substitutive effect of preventative care on the incidence of hospital admissions. The hospital admissions rate in Louisiana has declined faster than the national hospital admissions rate because the increase in primary care access for Louisiana residents has increased drastically from historically low levels.

# Hospital Admissions per 100,000 Residents



Source: Henry J. Kaiser Family Foundation. 2021. State Health Facts: Analysis of 1999 - 2019 AHA Annual Survey, Copyright 2020 by Health Forum, LLC, an affiliate of the American Hospital Association. https://www.kff.org/other/state-indicator/admissions-by-ownership/?currentTimeframe=0&selectedRows=%7B%22wrapups%22:%7B%22united-states%22:%7B%7D%7D,%22states%22:%7B%22louisiana%22:%7B%7D%7D%7D&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

The increase in outpatient visits per 100,000 residents has also contributed to the decline in hospital admissions because, like primary care visits, they reduce the incidence of hospital visits and admissions. Between 2003 and 2019 Louisiana and the nation experienced similar increases, 20 and 23 percent respectively, in the rate of outpatient visits per 100,000. While the rate of outpatient visits in Louisiana has been relatively inconsistent, it has typically been higher than the national rate.

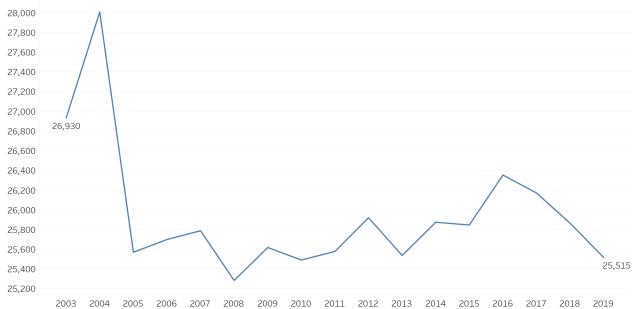




Source: Henry J. Kaiser Family Foundation. 2021. State Health Facts: Analysis of 1999 - 2019 AHA Annual Survey, Copyright 2020 by Health Forum, LLC, an affiliate of the American Hospital Association. https://www.kff.org/other/state-indicator/outpatient-visits-by-ownership/?currentTimeframe=0&selectedRows=%7B%22wrapups%22:%7B%22united-states%22:%7B%7D%7D,%22states%22:%7B%22louisiana%22:%7B%7D%7D%7D&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

The number of residents in certified nursing home facilities declined by five percent between 2003 and 2019. Unlike the sharp decline in hospital admissions, the modest drop in the number of residents in certified nursing home facilities is not directly related to increases in primary care visit utilization or the rate of outpatient visits; however, it should be noted that the number of residents in certified nursing home facilities has generally followed the state's population growth, which increased steadily during much of the last decade before modestly declining beginning in 2016.

# Residents in Certified Nursing Home Facilities



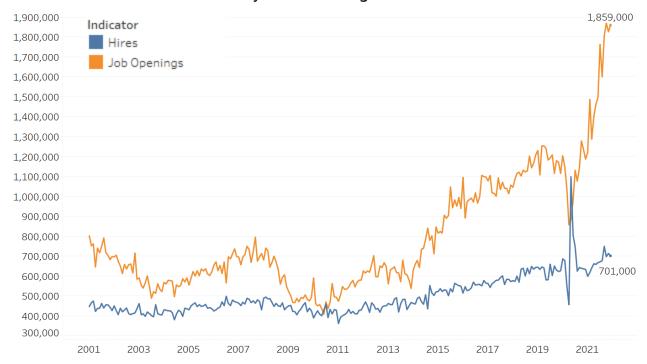
Source: Henry J. Kaiser Family Foundation. 2021. State Health Facts: Analysis of Certification and Survey Provider Enhanced Reports (CASPER) data. https://www.kff.org/other/state-indicator/number-of-nursing-facility-residents/?activeTab=graph&currentTimeframe=0&startTimeframe=16&selectedRows=%7B%22wrapups%22:%7B%22united-

states% 22:%7B%7D%7D,%22states%22:%7B%22louisiana%22:%7B%7D%7D%7D&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D#

# **Existing Labor Market**

Nationally the labor market for the healthcare and social assistance sector experienced steady growth during the past decade, as shown by the stable increase in hires during that period. Since 2015, however, the number of job openings have grown at a much faster pace than the rate of hires. The data suggest that labor demand for healthcare workers has increasingly been unmet by the American labor force. Data on hires and job openings for Louisiana's healthcare and social assistance sector are unavailable, but the national trend confirms that labor shortages in the healthcare industry have grown since 2015. The COVID-19 pandemic temporarily increased hires in 2020 but the number of job postings has grown even faster than the pre-pandemic trajectory.

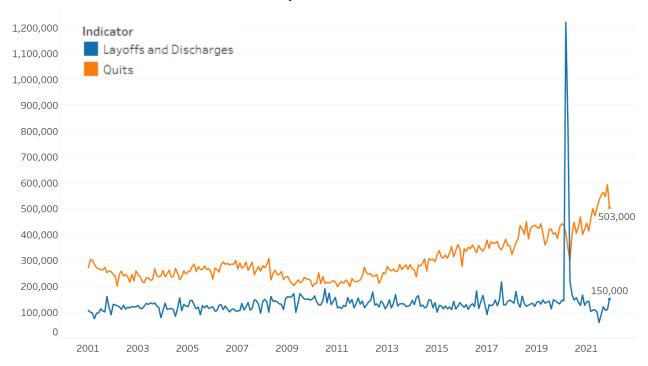
# Monthly Labor Postings and Hires



Source: Author analysis of the U.S. Bureau of Labor Statistics Job Openings and Labor Turnover Survey. https://www.bls.gov/jlt/

National data on quits, layoffs and discharges provide insight into the cause of the sharp increase in healthcare and social assistance job postings. The numbers of layoffs and discharges (terminations) were relatively stable for much of the two decades preceding the pandemic. Conversely, the rate of quits was stable for much of the 2000s but increased rapidly during the 2010s. This means that job postings have been driven by an increasing number of workers leaving the sector as well as by growth in consumer demand for healthcare services. Furthermore, the pandemic led to a record 1.2 million workers being laid off in March 2020 alone, with a large share of those workers not returning to work in the healthcare and social assistance sector. As a result, the healthcare industry is facing a labor shortage that started with an increase in worker-initiated quits and was magnified by pandemic-related layoffs.

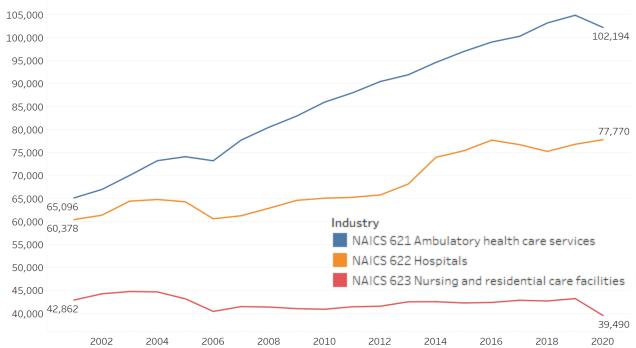
# Monthly Labor Turnover



Source: Author analysis of the U.S. Bureau of Labor Statistics Job Openings and Labor Turnover Survey. https://www.bls.gov/jlt/

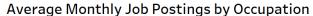
Administrative employment data for Louisiana's healthcare industries do not fully capture the nature of the labor shortage. Data show that employment grew steadily during the past two decades in the ambulatory healthcare services industry and the hospitals industry, but employment declined in the nursing and residential care facilities industry. Unlike data on hires, job postings, quits, and terminations, data on industry employment capture only the labor demand that was met and not the labor demand that went unfulfilled.

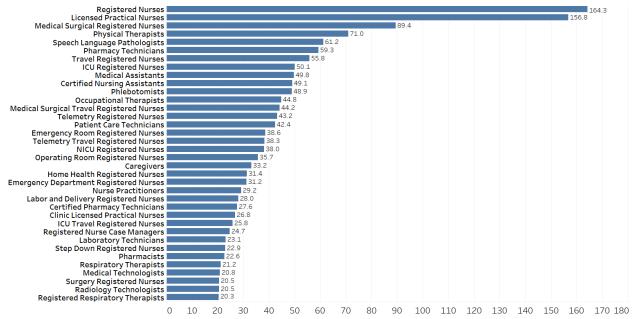




Source: Author analysis of the U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages. https://www.bls.gov/cew/

Data on job postings for healthcare occupations in Louisiana during the past five years show that registered nurses account for the greatest labor shortage, with an average of 164 unique job postings per month. Licensed practical nurses contribute 157 unique job postings per month and medical surgical registered nurses account for 89 unique job postings per month. The data show that nursing-related occupations account for the great majority of the labor shortage in Louisiana, with the exception of some occupations for technicians and therapists.

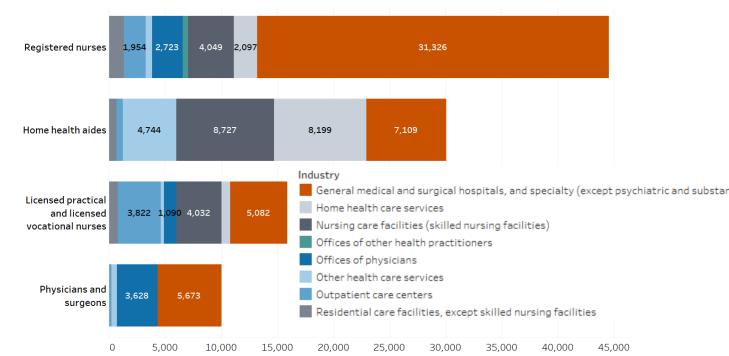




Source: Author analysis of the Emsi Q4 2021 Data Set. www.economicmodeling.com

The following figures show the concentration of healthcare occupations across healthcare industries. Data show that employment of, and demand for, registered nurses are driven mainly by hospitals. Registered nurses also represent the largest occupation in the healthcare industry. The second-largest occupation is home health aides, for which employment is distributed among hospitals, nursing care facilities, and home healthcare services. Third is licensed practical and licensed vocational nurses, with employment shared among hospitals, nursing care facilities, and outpatient care centers. The fourth largest healthcare occupation is physicians and surgeons, with employment concentrated in hospitals and physician offices.

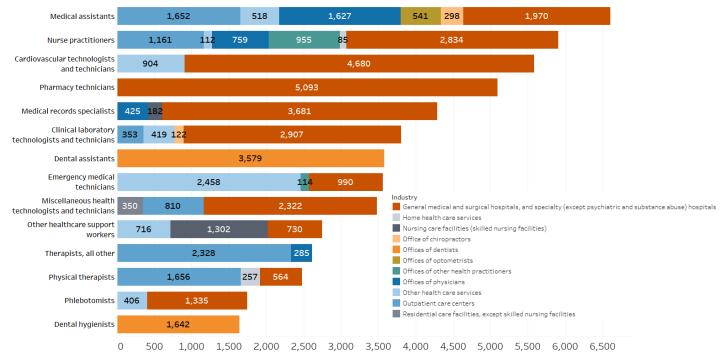




Source: Author analysis of the U.S. Bureau of Labor Statistics 2019 Current Population Survey via IPUMS-CPS, University of Minnesota, www.ipums.org

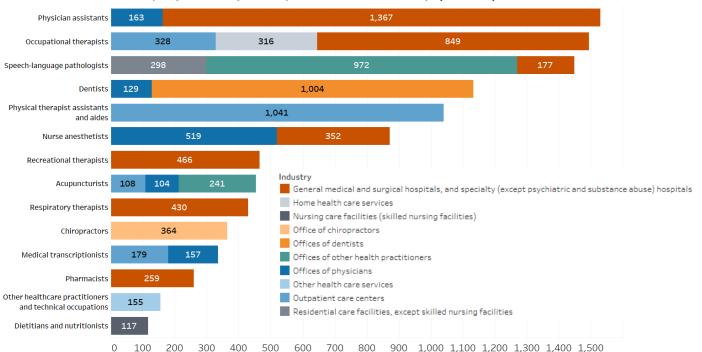
Data on the next 28 largest occupations employed in the healthcare industry show that most other occupations are employed by hospitals, physician offices, or outpatient care centers. The large shares of occupational employment in physician offices and outpatient care centers are included within the ambulatory healthcare services industry, which employs more workers than hospitals or nursing and residential care facilities.

# **Employment by Occupation and Industry**



**Source:** Author analysis of the U.S. Bureau of Labor Statistics 2019 Current Population Survey via IPUMS-CPS, University of Minnesota, www.ipums.org

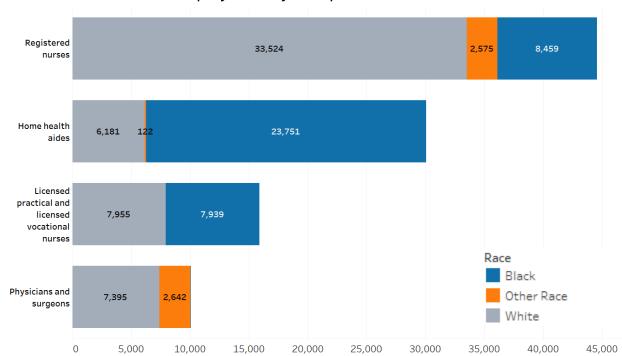
# Employment by Occupation and Industry (Cont'd)



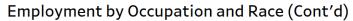
**Source:** Author analysis of the U.S. Bureau of Labor Statistics 2019 Current Population Survey via IPUMS-CPS, University of Minnesota, www.ipums.org

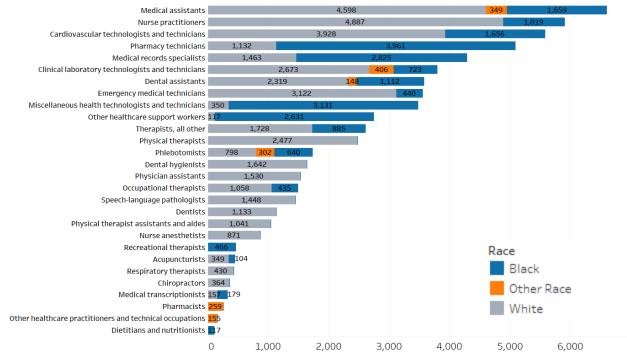
Looking at the current labor supply, we can show the underlying characteristics of Louisiana's healthcare industry workforce. Data reveal that the majority of registered nurses, physicians and surgeons are white, most home health aides are Black, and licensed practical and licensed vocational nurses are roughly evenly split among white and Black workers. **Data show that most occupations across the healthcare industry exhibit large concentrations of either white or Black workers, but rarely reflect the actual racial distribution of the Louisiana population.** Furthermore, the data show that white workers are largely concentrated in occupations with high earnings while Black workers are concentrated in occupations with relatively low earnings. Lastly, the data presented are intended to reflect the broader demographic trends of employment in Louisiana's healthcare occupations and should not be interpreted as absolute headcounts of workers in the state. This is due to the presence of large sampling errors in the survey data gathered by the U.S. Bureau of Labor Statistics Current Population Survey. For example, survey size limitations have led to omissions in the number of Black workers currently employed as physicians and surgeons, dentists, physical therapists, and other occupations reporting low shares of Black workers.

# **Employment by Occupation and Race**



Source: Author analysis of the U.S. Bureau of Labor Statistics 2019 Current Population Survey via IPUMS-CPS, University of Minnesota, www.ipums.org

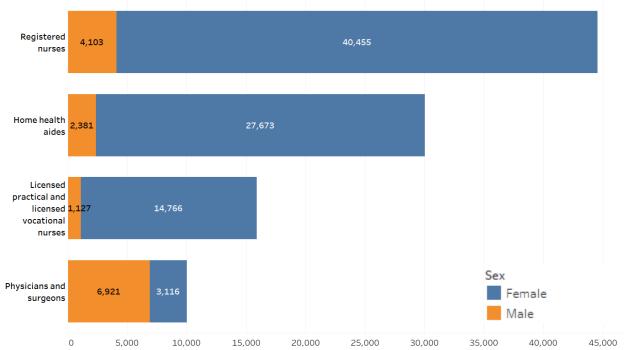




Source: Author analysis of the U.S. Bureau of Labor Statistics 2019 Current Population Survey via IPUMS-CPS, University of Minnesota, www.ipums.org

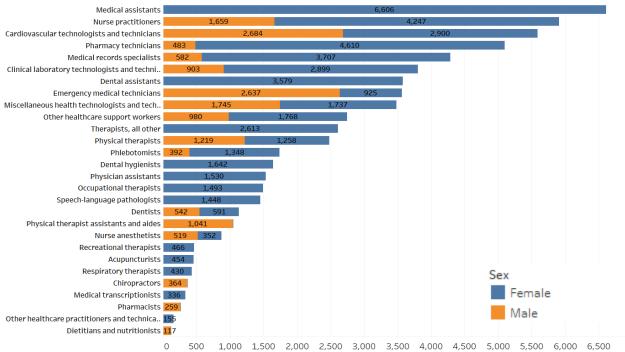
Data on the gender/sex characteristics of Louisiana's healthcare industry workers show that women represent the majority of workers in most healthcare occupations, including the highest-demand occupation – registered nurses. Men represent the majority of workers in a small subset of occupations, such as physicians and surgeons, emergency medical technicians, physical therapists assistants and aides, and chiropractors.

# **Employment by Occupation and Sex**



Source: Author analysis of the U.S. Bureau of Labor Statistics 2019 Current Population Survey via IPUMS-CPS, University of Minnesota, www.ipums.org

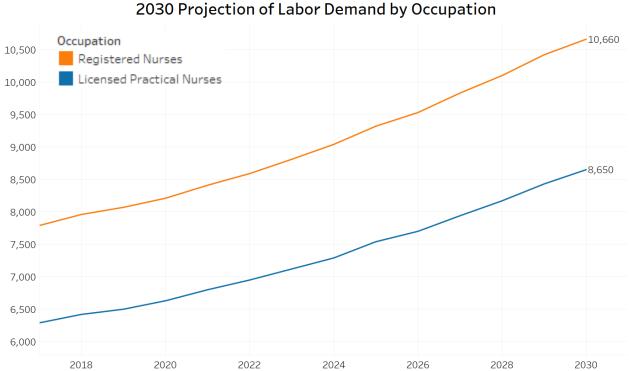
# Employment by Occupation and Sex (Cont'd)



Source: Author analysis of the U.S. Bureau of Labor Statistics 2019 Current Population Survey via IPUMS-CPS, University of Minnesota, www.ipums.org

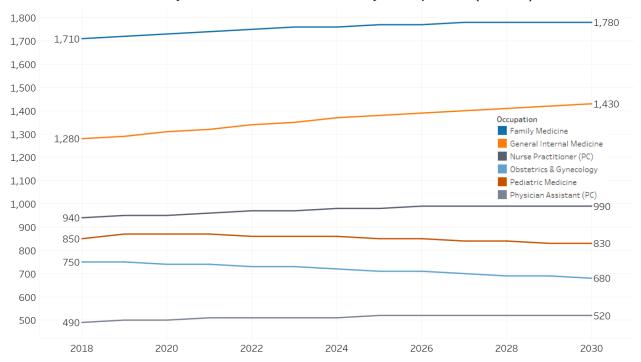
# **Projected Labor Market**

This section focuses on the Louisiana healthcare labor market projected in the year 2030. In particular, the analysis will identify the potential labor shortages in the near future. First, data show that the greatest labor demand in Louisiana's healthcare industry will continue to be in the occupations of registered nurse and licensed practical nurse. Data show that employers will require an additional 10,660 registered nurses and 8,650 licensed practical nurses in 2030. This means that employment for registered nurses needs to increase from current levels by 24 percent and employment for licensed practical nurses by 54 percent in order to meet the labor demand of 2030. The demand for these nursing occupations is considerably higher than the demand for occupations such as nurse practitioner and physician assistant.



Source: Author analysis of the U.S. Health Resources and Services Administration. 2021. Primary Care Workforce Projections: 2018-2030. https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand/primary-health





Source: Author analysis of the U.S. Health Resources and Services Administration. 2021. Primary Care Workforce Projections: 2018-2030. https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand/primary-health

The labor supply estimates for 2030 show that nursing shortages will continue unabated if interventions are not undertaken. Data show that only 4,478 of the 10,660 registered nurse positions will be filled, leaving a shortage of 6,182 registered nurses or 42 percent of total demand. Data show that only 772 of the 8,650 licensed practical nurse positions will be filled in 2030, a shortage of 7,878 positions. The labor demand and supply projections are calculated using distinct modeling methodologies that likely overstate the magnitude of the labor shortages projected because labor supply should grow at a faster pace when pandemic labor market constraints (risk of sickness, lack of childcare, etc.) recede. However, with the continuation of the current labor market, large labor shortages in the healthcare industry are projected into 2030.

<sup>&</sup>lt;sup>2</sup> Author calculations using data from the Health Resources and Services Administration. 2021. *Primary Care Workforce Projections: 2018-2030* and from labor market data.

Healthcare Industry Occupation Growth in Louisiana with U.S. Comparison: Based on 2020 Employment and Wage Levels and 2030 Projected Employment Growth

			Louisiana		United States			
Occupation	Description	Growth	Growth %	Median Wage	Growth	Growth %	Median Wage	
29-1141	Registered Nurses	4,478	11%	\$31.85	291,783	10%	\$36.22	
29-1171	Nurse Practitioners	1,616	51%	\$51.61	215,078	214%	\$53.69	
31-1128	Home Health and Personal Care Aides	8,739	24%	\$9.04	1,210,039	37%	\$13.02	
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	636	13%	\$102.87	34,896	9%	\$100.00	
29-1051	Pharmacists	638	13%	\$60.34	-8,884	-3%	\$61.88	
31-9092	Medical Assistants	2,117	26%	\$14.61	142,144	20%	\$17.23	
29-1122	Occupational Therapists	460	31%	\$42.22	55,264	61%	\$41.48	
31-1131	Nursing Assistants	1,381	7%	\$11.28	112,517	8%	\$14.83	
29-2061	Licensed Practical and Licensed Vocational Nurses	772	4%	\$20.16	76,216	11%	\$23.47	
29-9098	Health Information Technologists, Medical Registrars, Surgical Assistants, and Healthcare Practitioners and Technical Workers	621	24%	\$23.26	-33,933	-61%	\$24.92	

Source: Author analysis of the Emsi Q4 2021 Data Set. www.economicmodeling.com and the U.S. Health Resources and Services Administration. 2021. Primary Care Workforce Projections: 2018-2030. https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand/primary-health

Healthcare Industry Occupation Growth in Louisiana with U.S. Comparison: Based on 2020 Employment and Wage Levels and 2030 Projected Employment Growth (Cont'd)

		Louisiana			United States			
Occupation	Description	Growth	Growth %	Median Wage	Growth	Growth %	Median Wage	
29-1292	Dental Hygienists	402	17%	\$35.26	87,785	68%	\$37.06	
29-1071	Physician Assistants	304	24%	\$46.36	124,493	310%	\$55.48	
29-2018	Clinical Laboratory Technologists and Technicians	572	13%	\$23.70	33,780	10%	\$26.05	
29-1126	Respiratory Therapists	505	21%	\$26.75	25,336	19%	\$30.20	
29-1215	Family Medicine Physicians	126	31%	\$93.85	57,910	112%	\$99.70	
29-1127	Speech-Language Pathologists	304	21%	\$37.92	89,851	97%	\$38.69	
31-2021	Physical Therapist Assistants	416	27%	\$27.27	-5,155	-4%	\$28.74	

Source: Author analysis of the Emsi Q4 2021 Data Set. www.economicmodeling.com and the U.S. Health Resources and Services Administration. 2021. Primary Care Workforce Projections: 2018-2030. https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand/primary-health